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**Anders Karlsson** and **François Ledrappier\*** (fledrapp@nd.edu), Department of Mathematics, Hurley Hall, University of Notre Dame, Notre Dame, IN 46556. *Liouville property on regular covers.*

Let  $(M, g)$  be a complete connected Riemannian manifold with bounded sectional curvature. Under the assumption that  $M$  is a regular covering of a manifold with finite volume,  $M$  is Liouville (i.e. the only bounded harmonic functions are the constant functions) if, and only if, the linear rate of escape of the Brownian motion on  $M$  vanishes. (Received January 29, 2008)